UNIVERSITY OF GONDAR

COLLEGE OF MEDICINE AND HEALTH SCIENCE

INSTITUTE OF PUBLIC HEALTH

DATA MANAGEMENT PRACTICE AND ASSOCIATED FACTORS OF HEALTH EXTENSION WORKERS IN EAST GOJJAM ZONE, NORTHWEST ETHIOPIA, 2014

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A THESIS REPORT SUBMITTED TO INSTITUTE OF PUBLIC HEALTH, COLLEGE OF MEDICINE AND HEALTH SCIENCES, UNIVESITY OF GONDAR IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF PUBLIC HEALTH IN HEALTH INFORMATICS.

June, 2014

Gondar, Ethiopia

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Acknowledgement

I would like to pass my heartfelt gratitude to my advisors Mr. Atinkut Alamirrew and Mr. Mulusew Andualem who tirelessly and patiently assisted me in various aspects of this work starting from topic selection to this end. I am also grateful for institute of public health, University of Gondar for providing me this opportunity to conduct the research and allowing me to undertake my area of interest in that specific place. I also extend my thanks to East Gojjam zonal health department, woreda health offices, data collectors, supervisors and health extension workers who were participated in the study. I also recognize Ms. Birtukan Yitayew for translating my English version questionnaire to Amharic version and back to English Version, and my last gratitude goes to my parents.

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Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
DMP	Data Management Practice
ETB	Ethiopia birr
FMOH	Federal Ministry Of Health
HEP	Health Extension Package
HEW	Health Extension Worker
HIS	Health Information System
HIV	Human Immune Virus
HMIS	Health Management Information System
HP	Health Post
LGA	Local Government Authority
PHC	Primary Health Care
SNNPR	Southern Nation Nationalities and People Region
WHO	World Health Organization

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Abstract

Introduction: Health information is required for strategic planning, setting priorities, monitoring and improving quality of health care services. According to the assessment of the Ethiopian national health information system done by FMOH and WHO results, health information system resources, data management, dissemination and use are rated as “not adequate” among six components. Identifying factors affecting the data management practice of HEWs will have greater impute for policy makers, concerned offices, NGOs and coming researchers to have evidence based plan and take interventions.

Objective: The objective of the study is to assess data management practice and associated factors among health extension workers in East Gojjam zone, Northwest, Ethiopia.

Method: Institution based cross- sectional quantitative study was conducted. Simple random sampling technique was used to choose 40% of woredas and all HEWs in those randomly selected woredas were included in the study. The collected data was entered, cleaned and edited using Epi-info version 3.5.3; and analyzed using SPSS version 20. Bi variable and multivariable logistic regression analysis also carried out to see the effect of independent variables on the outcome variable.

Result: A total of 302 Health extension workers were included in the study with response rate of 100%. About 47.4% respondents had good knowledge and 53.3% of respondents had good practice on data management. Having good knowledge [AOR=2.75, 95% CI: 1.62, 4.66], using electronic media as a source of health information [AOR= 1.88 (95% CI: 1.022, 3.47)], using written document as a source of health information [AOR= 2.063 (95% CI: 1.136-3.765)], do not face difficulties in understanding reporting formats [AOR= 1.81 (95% CI: 1.04-3.14)] were independently associated with good data management practice.

Conclusion and recommendation: Generally, data management practice of HEWs who were working in the study area was not as such adequate. Knowledge on data management, don’t face difficulties in understanding reporting format, use written document and electronic material as a source of health information were significantly associated with data management practice of HEWs. Strengthen frequent supportive supervision, giving them capacity building trainings on data management and design easily understandable reporting formats are important to improve the problem.

Key words: Data**,** data management practice, HEWs, Ethiopia

1. Introduction

1.1. Statement of the Problem

Health systems in sub-Saharan African countries including Ethiopia often suffer from lack of human resources at every level, especially in rural areas where 85% of the population lives, which have been chronically underserved. In working out the best approach to undertake health work force issues, therefore, the Government chosen to begin by focusing on the community level provision, to launch the health extension program (1, 2).

In 2004, Ethiopia launched the health extension program (HEP), to expand the national health program to include community based health interventions as a primary component of the health sector development program (HSDP). The HEP is "a package of basic and essential promotion, preventive and curative health services targeting the households in a community, based on the principle of primary health care (PHC) to improve the families health status with their full participation (3)."

Health information is required for strategic planning and setting of priorities; clinical diagnosis and management of illness; quality improvement of health services; detection and control of emerging and endemic disease; human resource management; procurement and management of health commodities; program evaluation and other types of policies and program (4).

Around the world, countless lives are lost due to insufficient access to the quality of health information. Within the department of health, data are valued and managed as a strategic asset to support delivery of health services. Reliable and timely health information is an essential foundation of public health action which is used to improve efficiency, effectiveness and quality in health care delivery (5).

HEWs form an invaluable body of skilled human resources; and as the frontline health workforce with large and base line health data in the Ethiopian health system by which they are providing essential PHC services across the country (6, 7).

HEWs indicate that the highest proportion of their time is spent on health education followed by environmental health. Very little time for documentation, family health and

disease control and prevention. The community documentation given the least attention of them (7).

However, the remote location of the health posts, the skill of documentation and paper-based record-keeping procedures present a challenge for reporting the Health Extension Package information. This can lead to incomplete data and time lags between reporting and use of data for decision making, which hinders optimal health system performance (8).

1.2 Literature review

1.2.1. Importance of data management practice

Data that are accurate, complete and delivered on time to users as information are an important aspect in health planning, management and decision making. Evidence -based plans and decisions must, of necessity, be based on accurate, complete and timely data (4).

Moreover data must be collected, recorded and processed in order to use as information in decision making of planning, monitoring activities, education, supportive supervision and other purposes which are used to improve health care outcome. Ultimately, effective use of information has been identified as a key element in the success of large-scale efforts that have achieved major health improvements (5).

Healthcare services managers and providers should have enough knowledge of health information management; since the existence and utilization of precise, valid, timely and credible data and information are the bases of decision making, policy and planning development. Health information system effective management is one of advanced and valuable outcomes of health system management (4, 9).

1.2.2. Data Management Practice

Based on study findings from Iran on the assessment of district health information system, district health information system suffered from inefficiency and close to 90% of district health system decisions and policies were made either experience based or subjective individual opinion, not based on the utilization of information (9).

A comprehensive assessment conducted on the existing national HIS, in the West Bank and in the Gaza Strip, Palestinian showed that data management Practice was the weakest component 11% and 18% respectively (10).

According to a study conducted in Nigeria to assess health data recording, reporting and utilization practices among 107 PHC workers and 18 primary health centers; about 80 (74.8%) of PHC workers were used notepads, 52.3% used notebooks and only 47.7% used health management information system (HMIS)

forms to record data. The same study also revealed that 89 (83.2%) PHC workers sent out recorded data regularly (monthly) and 1(5.6%) of the health center workers report data two weeks following the month of reporting (11).

According to the study conducted in Nigeria to assess Village health workers record keeping practices, Ibarapa Central and Akinyele LGA did their activities to 61% and 96% record their health activities respectively. The same study also revealed that two thirds(40.7%) and (96%) respondents reported their records in Ibarapa Central and Akinyele LGA, respectively (12).

Based on the study conducted on assessment of quality of a routine data collection system for health in, Tanzania, there was lack of data in 66.7% of Private and 9.5% government facilities. The same study finding revealed there was no (0%) for quarterly Report forms and 43.3% annual report forms (13).

According to the assessment findings of the Ethiopian national health information system(HIS) done by FMOH and WHO, health information system (HIS) resources (39%), data management (33%) and dissemination and use (36%) are rated as “not adequate (14).”

The assessment on utilization of health information system at district level in Jimma zone showed that the utilization of the collected health information at unites were 8(26.7%) and 57(31.3%) for health post and health center, respectively (15).

According to the study findings conducted on Ethiopian HEP evaluation 75.3% of HEWs report on monthly basis, while 11.1% of them submit weekly basis and 8.6% reports as a need arises (8). Based on the assessment conducted on the existing paper based HIS by Amhara Regional Health Bureau(ARHB) in 2004 , health data collection, reporting and analysis in the region was inconsistent, fragmented and poor quality and redundant data (16).

Assessment done in North Gondar showed that, only 22.5% out of the 84.3% data collected daily was utilized at the data collection place. Among 45 units of HIV/AIDS in the study area, only 17.7% changed their data into information at district and facility level and used it for immediate decision making. The same

study revealed as 13.2% of the respondents properly documented their reports and registration books in the year 2005 to 2006 (17).

According to the study findings on the working conditions of HEWs in Ethiopia result revealed that All HPs send regular reports to woreda health offices, many every two weeks but all a month. Most HPs do not have a format for reporting (18).

Based on the study findings on the assessment of data management knowledge, practice and associated factors of HEWs in Gamo Gofa Zone, Southern Ethiopia result revealed that 98.1% of HEWs had good data management practice (19).

1.2.3. Factors on the data management practices of HEWs

1.2.3.1 Socio-demographic Characteristics

According to the study done in India on data use in the health sector there was an increment of information use tends in relation to respondents' position (20). Study findings from Ethiopian HEWs working conditions showed that majority (76%) had radio as source of information (18).

1.2.3.2 Technical factors on Data management practice

The assessment on utilization of HIS at district information communication technology level in Jimma zone showed that 236 (71%) health centers and district offices filled the format properly and the rest 29% did not do that due to non understandability and ambiguity of the tools/formats. The same study also showed as 170 (51.2%) of respondents lacked training and technical support on HMIS, 91(27.4%) lack of computer skills and unavailability of computer and 71(21.4%) inconsistency and incompleteness of the reports (15).

1.2.3.3 Knowledge on Data management

According to findings on assessment of accuracy of primary health care statistics reported by community based lady health workers in district Lahore, Showed that 32(80%), 6(15%) and 2 (5%) had good, satisfactory and unsatisfactory knowledge regarding data recording and reporting tools(21).

Based on the study findings on the assessment of data management knowledge, practice and associated factors of HEWs in Gamo Gofa Zone, Southern Ethiopia result revealed that 52.2% of HEWs had good knowledge on data management (19).

1.2.3.4 Organizational Factors

HEWs identified a number of organizational factors that impede their performance in the Kebele. However, rapid expansion of HEP and increasing numbers of health posts in remote areas, supervision is crucial to link the health posts and the woreda health offices(8).

According to the study conducted on Ethiopia health extension program evaluation part III health post performance survey, showed that two-third (67.3%) of the health posts were supervised by the district/zonal/regional health team during the three months preceding the survey (1).

As the study result on Study of the working conditions of HEWS in Ethiopia showed supervisors mostly checked records (77%), checked stocks (65%) and discussed work plan (58%) (18). Based on the assessment of the HIS in Albania ,49% of health professionals working in health facility were trained on reporting (22).

According to study findings from Tanzania on Bridging the gaps on the HMIS change the health sector 19% of health professionals received training on HMIS(23).

A study finding from Uganda on harmonizing and integrating HIV/AIDS information, 9% of the health facility staffs received training on HMIS(24). Based on study conducted in Arsi Zone, Ethiopia on utilization of HIS at district level 37.1% of health professionals received training on HMIS (25). Another study conducted on Ethiopian HEP on HEWS performance survey findings showed that 3.7% of HEWs have an inadequate stationary in their health post (8) .

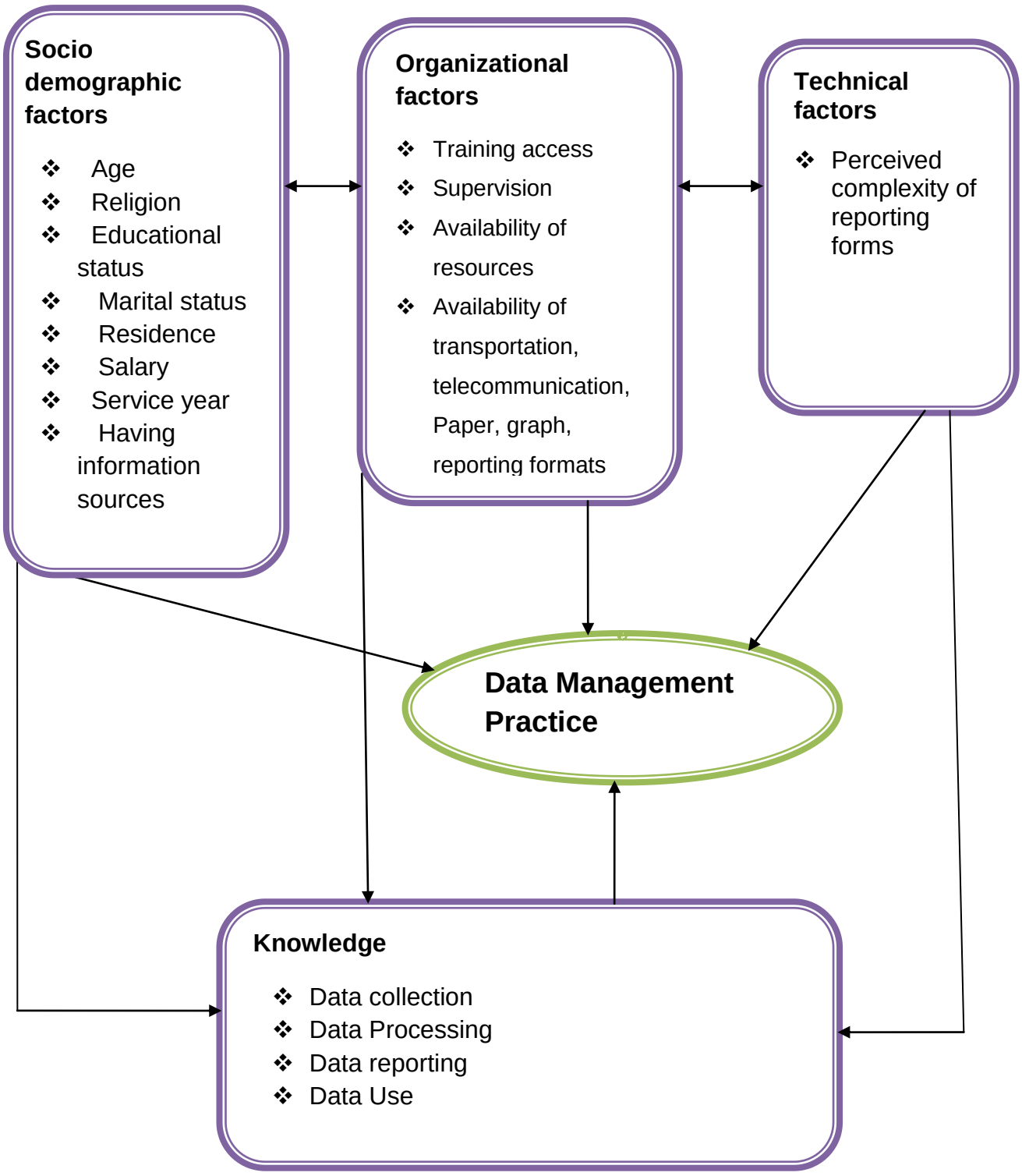

Figure 1 conceptual frame work adopted from different literatures

1.3. Justification

The major role of HEWs is major of preventive ,promotion, referral and data collection and timely reporting of their major tasks(26).

According to the assessment of the Ethiopian national HIS findings, HIS resources, data management practices, data disseminations and use were not adequate (14).

In Ethiopia quality of data and use remain weak, particularly at district health offices and PHC facilities. Capacity building, standardized and integrated data collection and reporting, information use, and use of appropriate technology have been identified as critical factors to strengthening and improving health sector Health Management Information System (HMIS)(4).

The Ethiopian health system is based on prevention and promotion since more than 85% of the country's population is in rural area in which prevention is best. Prevention based on the timely relevant information is the major work of HEWs. However the overall quality data management practices of health care institutions in Ethiopia are inadequate to access the right information to the right body in the right time using the appropriate channel(4). The seriousness of the problem will be bad at HEWs since they are the frontline forces to achieve 16 packages on more than 85% rural communities. Achieving the expected goal of HEP with weak data management practice will be a major challenge for Ethiopia since it has an impact on planning, resource allocation and evidence based decision practices of health care system of Ethiopia.

Therefore, assessing data management practice of HEWs and associated factors by including observation check list will give valuable evidence for policy makers, concerned offices, NGOs and coming researchers who are interested on this topic.

2. Objective

2.1 General Objective

To assess data management practice and associated factors of health extension workers in East Gojjam Zone, Ethiopia.

2.2 Specific Objective

- To determine data management practice of HEWs in East Gojjam Zone, Ethiopia
- To identify factors associated with data management practice of HEWs in East Gojjam Zone.

3. Method

3.1 Study area

- This Study was conducted in East Gojjam Zone, Which is one of 11 Zones in Amhara Region and Debre Markos is the capital town of this Zone which is 300km from Addis Abeba. According to the plan and program report of the East Gojjam Zone health department, there are 2 hospitals , 100 governmental health centers and 18 woreda health offices (4 urban and 14 rural) with 402 Health Post and 958 health extension workers. There are about 2 to 4 health extension workers per health post.

3.2 Study design

- Institution based cross- sectional study was conducted from March to May, 2014.

3.3 Source population

- All health extension workers who were working in all woredas of East Gojjam Zone.

3.4 Study population

- All health extension workers who were working in the randomly selected Woredas of the East Gojjam Zone.

3.4.1 Inclusion Criteria

- All Health Extension workers who were working in randomly selected woredas of East Gojjam Zone were included in the study.

3.4.2 Exclusion Criteria

- Health Extension Workers who were absent from their work for annual leave, long term training and leave for delivery issues during the data collection period were excluded.

3.5 Sample size determination and sampling procedures

3.5.1 Sample size

The sample size was calculated using Epi info version 3.5.3 by considering the following assumptions; population proportion P=50% since there is no previous study, α = 0.05, Margin of error (±0.05) and adding 10% non- response the final sample size was 302.

3.5.2 Sampling procedure

There are eighteen woredas in East Gojjam Zone. The size of Kebeles in each woreda ranges from 20 to 25. To address the sample size of this study, 40% of the woredas was included in the study. These 40% woredas was selected randomly from all woreda lists within the zone. On average, 2-4 HEWs were assigned in each health post. All health extension workers in those randomly selected woredas were included in the study.

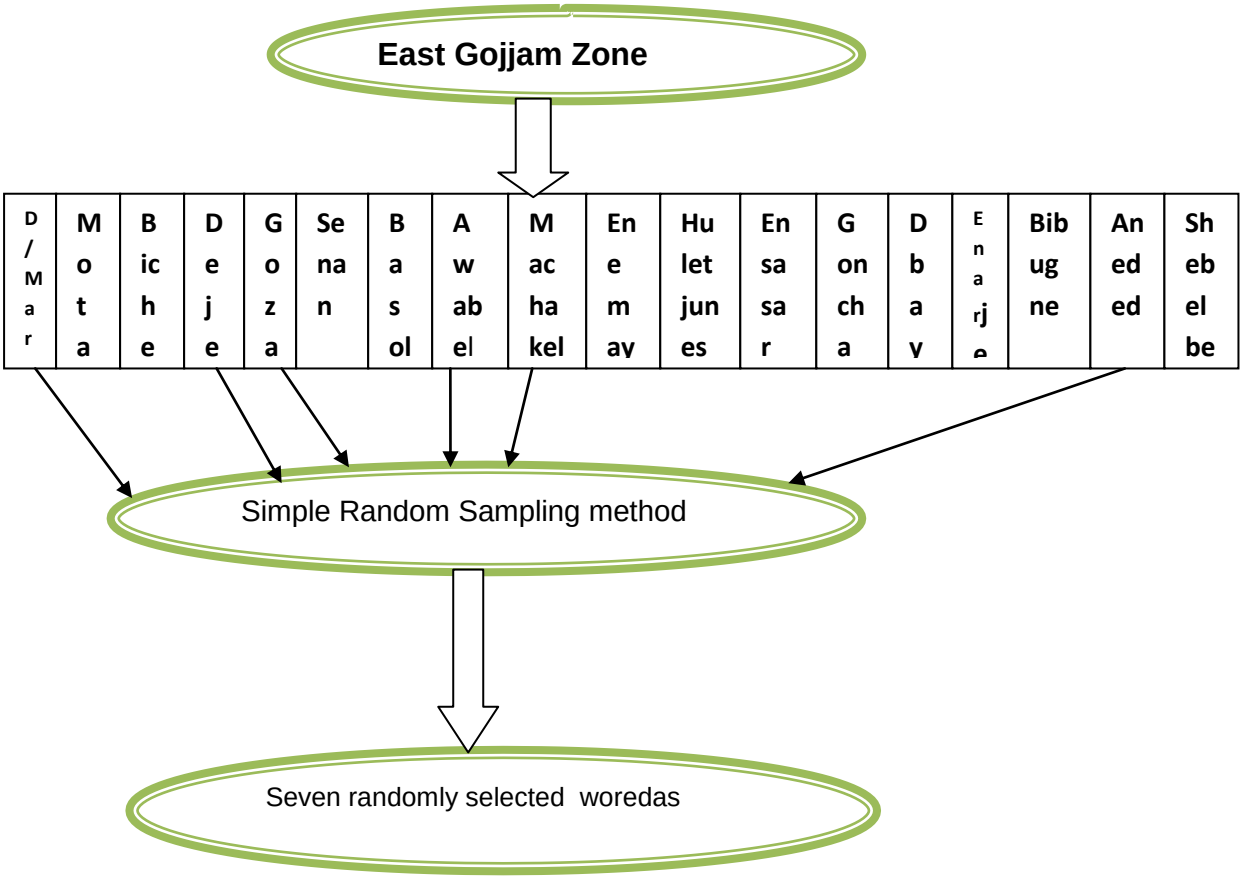

Figure 2:- Schematic presentation of sampling procedure

3.6. Study Variables

3.6.1. Dependant Variable

- Data Management Practice

3.6.2. Independent Variable

Table 1: list of independent variables

Socio demographic factors	Knowledge	Organizational factors	Technical factors
age religion educational status marital status residence salary service year having information sources	Data collection Data processing Data reporting Data Use	training access supervision availability of resources availability transportation, telecommunication. Availability of graph paper, paper , reporting formats	perceived understanding difficulty of report forms

3.7 Operational Definition

1. **Data collection:** is the act of planning for and obtaining useful information on Key quality characteristics(27).
2. **Data processing:** is the process of editing, coding, classification and tabulation of collected data so they are amenable to analysis(27).
3. **Data Management:** is a set of procedures for the collection, processing ,reporting and use(28).
4. **Have a Good knowledge:** HEWs who score above mean of 15.38 the questions asked for the assessment of knowledge.
5. **Poor Knowledge:** HEWs who score below mean of 15.38 the questions asked for the assessment of knowledge.
6. **Good Practice:** HEWs who score above mean of 8.27 of the questions asked for the assessment of practice.
7. **Poor Practice:** HEWs who score below mean 8.27 of the questions asked for the assessment of practice.

3.8. Data collection Procedure and Data quality control

3.8.1. Data collection Procedure

Data were collected through self-administered questionnaires and observation checklist. The questionnaire and check list was employed for the purpose of quantitative data. Questions were adopted from Amhara regional health bureau health post integrated supportive supervision chick list and from different literatures (1, 7, 8, 29).

The questionnaire was first developed in English and translated in to Amharic language for appropriateness and easiness in approaching the study participants and back to English by different persons to check the consistency of meaning.

Seven Woreda health extension officers as supervisors and 21 Woreda health office officers as data collectors were participated in data collection process..

3.8.3 Data quality control

A one day training on the objective of study, data collection procedures, data collecting tools, respondents approach, data confidentiality and respondents' right was given to the data collectors and supervisors prior to data collection date. Study participants were as informed well on data confidentiality, data collection procedures, objective of the study, importance of the study and other related issues. They were also told about their full rights and even as they can withdraw from the study in the meantime if they feel discomfort. In addition, they were requested for their written consent to participate in the study before questionnaire distribution**.** Supervisors did daily supportive supervision of data collectors.

3.9 Data management and analysis

Data from respondents were edited and cleaned manually before entered to computer. Data entry template was created based on study variables on Epi Info version 3.5.3. Then, manually edited data was entered in to Epi Info version 3.5.3 for further editing and exported to SPSS version 20 for analysis purpose.

Descriptive statistics of the collected data was done for variables in the study using statistical measurements. Frequency tables, graphs, percentages, means and standard deviations were used to present data found on observation check list and questionnaire.

Bi variable analysis was conducted primarily to check which variables have association with the dependent variable individually. Variables found an association with the dependent variable at 0.2 P-value were entered in to multivariable logistic regression for controlling the possible effect of confounders and finally the variables which had significant association (P value <0.05) were considered as determinant factors for data management practices of HEWs. Odds Ratio at 95%CL was used to describe the strength of association between the study and outcome variables. Hosmer and Lemeshow goodness of fit-test was used to check model adequacy.

4. Ethical consideration

Ethical clearance was obtained from the Ethical review board of University of Gondar. Communication with the different official administrators was made through formal letter obtained from the University of Gondar. Supporting letters were also obtained from East Gojjam Zone. The purpose and objective of the study was informed and written consent was obtained from each study participants. Participants were also informed that participation was on voluntary basis and they can stop or leave the participation at any time if they were not comfortable about the questionnaire. In order to keep confidentiality of any information provided by study subjects, the data collection procedure was anonymous and keeping their privacy during filling the questionnaire was done by letting them to fill it alone.

5. Result

5.1. Socio-demographic and Economic Characteristics

A total of 302 HEWs were participated in the study with a response rate of 100%. Majority of the participants, 171(56.6%) were in the age group of 28-35 years. Out of the total respondents 155(51.3%) have ≤5 years of experience and 260(86.1%) of participants were certificate in their educational status (table-1).

Table-2: Distribution of socio-demographic characteristics of HEWs in East Gojjam Zone, Ethiopia, May, 2014 (n=302).

Variables	Frequency	Percentage
Age		
19-27	131	43.4%
28-35	171	56.6%
Religion		
Orthodox	293	97%
Muslim	9	3%
Educational status		
certificate	260	86.1%
diploma	42	13.9%
Marital status		
single	155	51.3%
married	135	44.7%
divorced	11	3.6%
widowed	1	0.3%
Residence		
rural	263	87.1%
urban	39	12.9%
Salary		
<1427 Eth. Birr	122	40.4%
≥1427 Eth. Birr	180	59.6%
Experience		
≤5 years	155	51.3%
>5 years	147	48.7%
Written document *		
No	204	67.6%
Yes	98	32.1%
Electronic sources*		
No	208	68.9%
Yes	94	31.1%

- *Written document as a source of health information (news paper, pre-HMIS document, EDHS)
- *Electronic media as health information source(Television, Radio)

5.2. Data Management Knowledge

The mean and standard deviation of knowledge score of the respondents was 15.38 and ±3.33, respectively. Health extension workers who had good knowledge on data management were found to be 47.4% CI (36.4, 58.4).

5.3. Technical factors

Majority 186(61.6%) of respondents faced difficulties in understanding of report formats, in which 46.2% of them facing difficulties because of inconsistency of the reporting formats. Majority of respondents 291(96.4%) had definite time for submitting report. One hundred thirty seven (45.4%) of respondents had faced presence of challenge for their daily activity of them 36.5% were due to lack of transportation service (Table-3).

5.4. Organizational factors

The majority of the respondents 275(91.1%) had reference materials in their Bureau. Two hundred fifty seven (85.1%) and 286(94.7%) of the study participants had reporting formats in their Bureau and were received supportive supervision, respectively. Substantial number of respondents 264(87.4%) were took training on data management (table-4).

5.5 The Observed conditions of HEWs

Results of the observation check list reveal that 239(79.1%), 243(80.5%) and 237(78.5%) of respondents had weekly, monthly and quarterly copy of reports in their office, respectively. One hundred seventy eight(58.9%),181(59.9%) and 151(50%) of respondents had Constructed tables, charts, graphs or maps for data ,Keble baseline data and document of the last survey in their office, respectively.

Table 3: Technical factors for data management of HEWs in East Gojjam Zone, May, 2014, (n=302)

Variables	Frequency	Percentage
Report format Understanding difficulties		
Yes	186	61.6%
No	116	38.4%
Reason for difficulties		
Uncommon words	72	38.7%
Abbreviations	28	15.1%
Inconsistency of formats	86	46.2%
Submitting report with definite time		
No	11	3.6%
Yes	291	96.4%
Regular reporting habit		
usually	185	61.3%
sometimes delayed	109	36.1%
usually delayed	8	2.6%
Reason for Delay of reporting		
lack of capacity to compile and report	50	42.7%
Over burden with other activity	54	46.2%
Negligence	8	6.8%
Other reasons for dalliance	5	4.3%
Presence of challenge for daily activity *		
No	165	54.6%
Yes	137	45.4%
Types of daily challenges		
Transportation*	50	36.5%
Unwillingness of the Community	30	21.9%
Distance of place	30	21.9%
Absence of the community	20	14.6%
Shortage of Registration Formats	7	5.1%

*Challenge for daily activity (transportation, Unwillingness of the Community, Distance of place, absence of the community, Shortage of Registration Formats)

Transportation* -transportation service for their outreach and house to house work

Table 4. Organizational factors for data management of HEWs in East Gojjam Zone, May, 2014,(n=302)

Variables	Frequency	Percentage
Reference Material available		
No	27	8.9%
Yes	275	91.1%
Report Format available		
No	45	14.9%
Yes	257	85.1%
Transportation Service available*		
No	180	59.6%
Yes	122	40.4%
Telecommunications service available	222	73.5%
No	80	26.5%
Yes		
Stationary Material available		
No	235	77.8%
Yes	67	22.2%
Graph paper available		
No	248	82.1%
Yes	54	17.9%
Paper for Work available		
No	253	83.8%
Yes	49	16.2%
Supportive supervision		
No	16	5.3%
Yes	286	94.7%
Frequency Supportive supervision		
Weekly	137	47.9%
Monthly	62	21.7%
Quarterly	49	17.05%
Bi-annually	37	12.9%
annually	1	0.35%
Supervisor Check data management		
No	3	1.05%
Yes	283	98.95%
training on data management		
No	38	12.6%
Yes	264	87.4%
Trained on		
HMIS		72.2%
Data Processing	218	31.1%
Planning	94	13.9%
Data Use	42	15.6%
Reporting	47	24.8%
	75	

-Transportation Service available* - transportation service between the HP and their Woreda health offices

Table 5: observation finding of HEWs in East Gojjam Zone, May, 2014, (n=302)

Variables	frequency	percentage
weekly report		
Yes	239	79.1%
No	63	20.9%
monthly report		
Yes	243	80.5%
No	59	19.5%
quarterly report		
Yes	237	78.5%
No	65	21.5%
constructed tables, charts, graphs or maps for data of the last Quarter (the 4th quarter of 2005E.C)		
Yes	178	58.9%
No	124	41.1%
Kebele baseline census data based on age and sex		
Yes	181	59.9%
No	121	40.1%
document of the last survey conducted in this Kebele for example Polio, Measles etc campaign		
Yes	151	50%
No	151	50%

5.6 Data Management Practice

The mean and standard deviation of practice score of respondents was 8.27 and ±3.19, respectively. By considering mean as cut off point, 53.3% CI(47.9,58.6) respondents have good Practice on data management.(Figure 3)

More than three fourth of the respondents (78.8%) had written list of health extension package. Out of the total respondents, 87(28.8%),132(43.7%) and 223(73.8%) use writing materials of notepad, notebook and HMIS form ,respectively for data recording but 7% of HEWs did not use any writing materials for data recording. Most of the respondents (88.7%) had daily recording habit.

Most of respondents (90.4%) use collected data after converting it into information for different purpose of which 209(69.2%), 211(69.9%), 192(63.6%) and 109(36.1%) of respondents use the collected data for Daily activity, for Planning, for Monitoring and Evaluation and for Management purpose, respectively. But 9.6 % of respondents did not use the collected data. This study result show that 63.6%, 86.8%, 30.8% and 50.7% of HEWs report as need arise, Weekly, Bi- Monthly and Monthly.

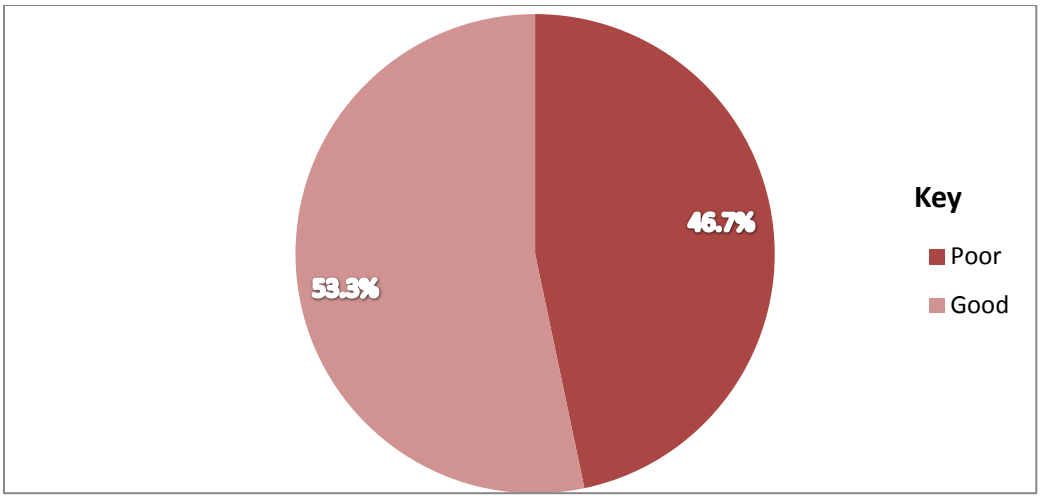

Figure 3: Data management practice of HEWs in East Gojjam Zone, May, 2014, (n=302)

5.7 Factors associated with Data Management Practice of Health Extension Workers

The study examined association of socio-demographic and economic, knowledge, technical, organizational related factors with data management practice of HEWs.
The result of bi variable analysis showed that there was significant association between good data management practice and use of written document as a source of health information, age, knowledge, understanding difficulties of reporting format, frequency of supportive supervision and availability of paper for work, graph paper, stationary, telecommunication and transportation service.

But after controlling for possible confounders, the result of multivariable analysis reveals that only knowledge, understanding difficulties of reporting format, use electronic media as a source of health information, use written document as a source of health information was significantly associated with good data management practice of health extension workers.

Accordingly, knowledge of heath extension workers regarding health data management was significantly associated with health data management practice. It was noticed that, HEWs with good knowledge health data management were 2.75 [AOR= 2.75 (95% CI: 1.62, 4.66)] times more likely to have good health data management practice as compared to those HEWs with poor knowledge on health data management.

The result of this study revealed that, HEWs who were using Electronic media as a source of health information were 1.88 [AOR= 1.88 (95% CI: 1.022, 3.47)] times more likely to have good health data management practice as compared to those HEWs who do not use. The study finding also reveals that HEWs who were using written health document as a source of health information were 2.063 [AOR= 2.063 (95% CI: 1.136-3.765)] times more likely to have good health data management practice as compared to those HEW who do not use.

Those health extension workers who don't face difficulties in understanding of reporting format were 1.81 [AOR= 1.81 (95% CI: 1.04-3.14)] times more likely to have good health data management practice than those HEWs facing difficulties in understanding reporting format.(Table-5)

Table-6 Factors associated with data management practice of HEWs in East Gojjam, May, 2014, (n=302)

Variables	Data management practice		Crude OR (95% C.I)	Adjusted OR (95% C.I)	P-Value
	Good	Poor			
Knowledge					
Good	99	44	3.52(2.18,5.67)	2.75(1.62,4.6)	0.000
poor	62	97	1	1	
Written Document					
Yes	63	35	1.95 (1.18, 3.19)	2.06(1.14,3.7)	0.018
No	98	106	1	1	
Age					
19-27	82	49	1.95(1.323,2.816)		
28-35	79	92	1		
Understanding difficulties of report format					
Yes	82	104	1	1	
No	79	37	2.71(1.03,3.56)	1.81(1.04,3.1)	0.035
Availability of paper for work					
Yes	36	13	2.84 (1.18, 3.69)		
No	125	128	1		
Availability of graph paper					
Yes	40	14	2.99 (1.17, 3.64)		
No	121	127	1		
Availability of Stationary*					
Yes	46	21	2.29(1.24, 3.78)		
No	115	120	1		
Telecommunication service					
Yes	53	27	2.07 (1.28, 2.82)		
No	108	114	1		
Transportation service					
Yes	82	40	2.62 (1.24, 2.88)		
No	79	101	1		
Electronics Media					
Yes	56	38	1.45 (1.08, 2.67)	1.88(1.02,3.4)	0.043
No	105	103	1	1	

-*Availability of stationary (pencil, pen, marker)

6. Discussion

The result of this study revealed that about 53.3% of health Extension workers had good data management practice. This study finding was greater than the study finding in Ethiopia (14), Gaza strip and Palestinian (10). Which is 33.3%, 11% and 18%, respectively. This discrepancy may be due to difference in tool used in assessing data management practice between three study areas. The current study used the tool only to assess data management practice but the later study used the tool to assess six components of health information system, in which data management practice is one the six components. But it is lower than the study finding in Gamo Gofa, Ethiopia. This could be explained as difference in understanding of reporting format among health extension workers between the two study areas. In the current study of health extension workers were faced understanding difficulties of report format as compared to the later study (19).

This study also revealed that out of the total respondents, 87(28.8%), 132(43.7%) and 223(73.8%) use writing materials of notepad, notebook and HMIS form, respectively for data recording. this finding is lower than a study finding in Nigeria in which about 74.8%, 52.3% and 47.7% of PHC workers used notepads, notebooks and health management information system (HMIS) forms for data recording respectively(11). This difference between the two study areas may be due to most of HEWs in the current study took training on HMIS which may create better chance to use HIMS form for data recording than using other forms of data recording.

In this finding 63.6%, 86.8%, 30.8% and 50.7% of HEWs report as need arise, weekly, Bi-Monthly and Monthly. This finding also supported by observation findings of 79.1% and 80.5% of respondents had copy of weekly and monthly report formats in their office. Which is better than the study result conducted on Ethiopian health extension program evaluation Volume-II report monthly (75.3%), weekly (11.1%) and as a need arises (8.6%).This discrepancy may be due to the study year difference when the two studies conducted. By this time gap HEWs may have better opportunity for in service trainings and frequent supportive supervision regarding data management practice. By having this opportunity HEWs may improve their capacity concerning reporting. But it is a bit lower study result in Nigeria 83.2% of PHC workers monthly report(11). This explained as this difference is may be due to the difference of their type of profession.

The study result show that, Two hundred seventy three (90.4%) of HEWs were utilized the collected data for different purpose. in which 69.9%, 63.6% and 36.1% of respondents use the collected data for daily activity, for planning, for monitoring and evaluation and for management purpose, respectively. This is higher than the study finding in Jimma(26.7%) and North Gondar zone (22.5%) of the collected data utilized at the health post(15, 17).

This may be due difference in period/ year when the two studies conducted, the current study was conducted 3 and 8 years later as compared to the later study conducted in Jimma and North Gondar , respectively. By this time gap HEWs may have better opportunity for in service trainings and frequent supportive supervision regarding data management. So that having this opportunity HEWs may improve their capacity concerning information utilization.

Accordingly, knowledge of HEWs regarding health data management was significantly associated with health data management practice. It was noticed that, HEWs with good knowledge health data management were 2.75 [AOR= 2.75 (95% CI: 1.62-4.66)] times more likely to have good health data management practice as compared to those HEWs with poor knowledge on health data management. This result is in agreement with study finding in Gamo Gofa, Ethiopia which is 52.2% of health extension workers had good knowledge on data management(19). This is evident that having good knowledge on data management practice may be considered as one important fertile ground/foundation for good data management. As a result health extension workers with good knowledge on health data management will have good data management practice.

Those HEWs who don't face challenges in understanding reporting format were 1.81 [AOR= 1.81 (95% CI: 1.04-3.14)] times more likely to have good health data management practice than those HEWs facing difficulties in understanding reporting format. This could be explained as failing to understand reporting formats will lead to miss practice on Data management. Even inclusion of ambiguous texts and indicators in the reporting format will result in poor data management(30).

It was noticed that, HEWs who were using written health document as a source of health Information were more than 2.063 [AOR= 2.063 (95% CI: 1.136-3.765)] times

more likely to have good health data management practice as compared to those HEWs who did not use. This could be explained as using written document (i.e. Census, pre-HMIS document, news paper and EDHS) as source of information will help HEWs to clarify ambiguous indicators, plan based on available base line data's and correctly report what they did and this opportunities will enable them to have good data management practice as compared to those who did not use(31).

Use of electronic media as a source of health information was significantly associated with health data management practice of HEWs. It was noticed that, HEWs who are using Electronic media as a source of health information were 1.88 [AOR= 1.88 (95% CI: 1.022-3.47)] times more likely to have good Health data management practice as compared to those HEWs who do not use. This may be explained as having electronic media as source of information may help HEWs to get up to date health related information(32).

7. Strength and Limitation of the study

Strength

- By including observation check list use to see their reporting practice

Limitation

- The tool used for measuring Data management practice of health extension workers is not standardized
- Using woreda health office officers as data collectors
- This study also didn't include Qualitative design
- Because of lack of public studies on data management practice of health extension workers, comparison with other studies was made under limitation

8. Conclusion and Recommendation

8.1 Conclusion

Generally, this study showed that data management practice of health extension workers working in East Gojjam zone was not as such adequate. Knowledge on data management, did not facing difficulties in understanding reporting format, use written document and Electronic material as a source of health information were significantly associated with Data management practice of health extension workers.

8.2 Recommendation

For Ministry of health and Amhara Health Bureau

- It is better to plan capacity building trainings for health extension workers so as to improve their Data management knowledge and practice.
- Better to design report formats in clear, consistent and more understandable form so as to remove any of ambiguous terms.

For Zonal health department and Woreda health office

- Better to strengthen frequent supportive supervision for health extension workers so as to early identify gaps and take appropriate action on DMP of HEWs.
- Better to plan ongoing review meeting to enhance experience sharing with through identification of lessons to be learned on data management practice of health extension workers.

For Researchers

- It is better to include qualitative study design so as to further strengthen the finding and explore other important contributing factors for poor data management practice.
- Better to design standardized and validated tool for the assessment of data management practice of health extension workers.

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10. Annex

Annex 1: Consent form

Hello My name is …….I am here on behalf of Segenet Yitayew, student of institute of public health in university of Gondar.

She is conducting a research for partial fulfillment of second degree on “Data Management Practice and Associated factors among Health Extension Workers in East Gojjam Zone, Ethiopia”. She has received permission from institute of public health at university of Gondar, Zonal Health sector and Woreda health office to conduct this study.

The objective of this study is to assess data management practice and associated factors of health extension workers in East Gojam Zone. You are selected for the study since you are in the study group with the hope that you will cooperate with me. I am kindly requesting you to answer the questions that I have prepared for you. I am assuring all information that you are going to deliver to me will be coded for anonymity. Only the principal investigator and the researcher assistants collecting data will have access to the data.

Would you be willing to participate? Yes ……1 No……..2

Having been well explained and informed of the intentions and benefits of the study, I voluntarily consent to participate in the study.

Respondent.

	Sign.	Date
	----------	------
Data collector Name	Sign.	Date
----------	----------	----------

Annex 2: Questionnaire

Part I Questions related to socio-demographic characteristics

S.NO	Question	Choice of answer	Skip to
101	Age	years	
102	Religion	1. Orthodox 2. Muslim 3. Protestant 4.Catholic 5.If others specify,	
103	Educational status	1.10+1 2.Diploma nurse 3.If other specify	
104	Marital status	1.Single 2.Married 3.Divorced 4.Widowed	
105	Residence of the respondent	1Rural Kebele 2.Urban Kebele	
106	Salary per month	birr	
107	Service year	year	
108	What is your information source? (you can choose more than one)	1.television 2.radio 3.newspaper 4.pre-HMIS document 5. Census 6.EDHS 7.if other specify----------	

Part II Questions related to knowledge on data management

201	What is data management? (you can choose more than one)	1.collection of data 2.processing of data 3. reporting data 4. data quality control 5. I don't know	
202	What are the methods of data collection? (you can choose more than one)	1.interview 2. observation 3. recording review	
203	Assume that you have 200 households in your Keble of this 30 households are finished the expected health extension packages. If you are asked to report this number in percentage, what percent of households finished the expected health extension packages?	Choose best answer 1. 15% 2. 30% 3. 13%	
204	For whom Did you report the performed	1.cluster health center	

	activities? (you can choose more than one)	2.Woreda health office 3. if other specify….	
205	What does data quality mean? (you can choose more than one)	1.complete data 2.consistent data 3.correct data 4. not redundant 5. not overlapped 6. timeliness	
206	What does complete data mean?	1.if it is submitted by all(most) reporting facilities 2.if there is no mathematical errors 3.if the data are within the normal ranges	
207	When we say data are correct?	1.if it is submitted by all(most) reporting facilities 2.if there is no mathematical errors 3.if the data are within the normal ranges	
208	How can we know data are consistent?	1.if it is submitted by all(most) reporting facilities 2.if there is no mathematical errors 3.if the data are within the normal ranges	

Part III Practice of HEWs towards data management

301	Do you have written list of health extension packages?	No Yes	
302	Which writing material do you use to record data?	1.Notepad 2.Notbook 3. HMIS forms	
303	Do you register your daily activity?	0.No 1.Yes	
304	If your answer for Q303 is yes, do you use the collected data after converting it into information or report?	0.No 1.Yes	
305	If your answer for Q304 is yes, for what purpose do you use the collected data? (you can choose more than one)	1.for daily activity 2. For planning 3.for monitoring and evaluation 4.for management 5. Not use	

306	Frequency of reporting of the collected data (you can choose more than one)	1.As need arises 2.Weekly 3.Bi-monthly 4.Monthly 5. Not report/ not sending report 6.for report	

Part IV. Influence of Organizational factors on Data management

401	Are reference materials available in your office?	0.No 1.Yes	
402	Do you have report format?	0.No 1.Yes	
403	Do you have transportation facilities?	0.No 1.Yes	
404	Do you have telecommunication service?	0.No 1.Yes	
405	Does your woreda health office provide you pen, pencil or marker?(stationary material)	0.No 1.Yes	
406	Do you have graph papers in your office?	0.No 1.Yes	
407	Do you have white papers in your office?	0.No 1.Yes	
408	Have you ever been supervised by supervisors?	0.No 1.Yes	
409	If yes, How often are you supervised?	1.Every week 2.Every month 3. Every 3 month 4. Every 6 month 5. Every year 6.ifother specify……	
410	If yes for Q408, Does your supervisor check your data management practice?	0.No 1.Yes	
411	Have you ever received any formal training in the following area? (you can choose more than one)	Types of training 1.HMIS 2.data analysis 3.planning 4.data utilization 5.how to report 6.not took any training	

Part V. Influence of technical factors on data management

501	Are the reporting formats difficult to understand?	0.No 1.Yes	
502	What makes the formats to be difficult to understand for you?	1.uncommen words/terms 2.abbrevations 3.formats are inconsistent 4. if other specify……..	
503	Is there definite/fixed time for report submission?	0.No 1.Yes	
504	If yes, how regularity of your reporting habit?	1.usually 2.sometimes delayed 3.usually delayed	
505	What is your reason for delay report?	1. lack of capacity to compile and report 2. Over burden over with other activity 3. Negligence 4.Dont' know 5.other specify……..	
506	Have you faced challenges in your daily activity?	0.No 1.Yes	
507	If yes for Q506,what is the challenge?	1.transportation 2.unwillingeness of the community 3.distance 4.unpresence of the community 5.registration shortage 6.if other specify	

That is the end of our questionnaire. Thank you very much for taking your time to answer these questions. We appreciate your help.

Physical observation checklist

S.No	Practices	Observed findings	
		Yes	No
1	Weekly Report for the collected Data		
2	Monthly Report for the collected Data		
3	Quarterly Report for the collected Data		
4	Constructed tables, charts, graphs or maps for data of the last Quarter (the 4th Quarter of 2005E.C)		
5	Keble base line census data based on Age and sex		
6	document of the last survey conducted in this Kebele for example Polio, Measles etc Campaign		

Annex 3:

Information and consent sheet

Information Sheet and consent form prepared for all health extension workers who are working at health posts in East Gojjam zone who are going to participate in the afore mentioned Research Project.

Title of the Research Project

- ✓ Data Management Practice and associated factors among health extension workers in East Gojjam Zone, Ethiopia, 2014.

Name of Principal Investigator: Segenet Yitayew

Name of the Organization: Institute of Public Health, Gondar College of Medicine and Health Sciences, University of Gondar.

Name of the Sponsor: University of Gondar

Introduction

This information sheet and consent form is prepared with the aim of explaining the research project that you are asked to join by the group of research investigators. Please read about the purpose of the study and ask any questions about the study before you agree to join. You may ask questions at any time after joining the study. The investigation include final year MPH in Health informatics graduate student from the school of public health, college of medicine and health science, university of Gondar, and two advisor from the university of Gondar..The research group includes 7 supervisors and 21 data collectors, and two advisors from University of Gondar.

Purpose of the Research Project

The main aim of the research project is Data Management Practice and associated factors among health extension workers in East Gojjam Zone. The results of this study will be used as a basis, especially in the study area, to design appropriate intervention programs to address the factors. In the past, the data management practice and its associated factors among health extension workers has not been conducted in the study area at all. It also will serve as a springboard for subsequent studies in the zone.

Procedure

As this study involves currently working health extension workers for assessment, you are selected to be one of the study participants if you are willing to take part in this study. You are selected for this study because you are currently working health extension employed by government.

In order to assess data management practice and its factors among currently working health extension workers, I kindly invite you to take part in our project. If you are willing to practice in our project I am so happy for you to participate in this study and I need you to clearly understand the aim of this study .Then; you are kindly requested to give your response to the data collectors.

For this questionnaire based study, study subjects are health extension workers who are currently working in this area. All the response given by participants and the result obtained will be kept in a confidential manner by using coding system whereby no one will have access to your response.

Risk and /or Discomfort

By participating in this research project you may feel that it has some discomfort especially on wasting your time (a maximum of 30 minutes) but this may not be too much as you are one of the member of the government employed health extension workerl, so your response will help as an important input to show the gap and means to improve data management practice. There is no risk in participating in this research project.

Benefits

If you are participating in this research project, there may not be direct benefit to you but your participation is likely to help us in showing the gap of data management practice and factors associated with low data management practice and helps develop better improvement of the evidence based decision making process.

Incentives/Payments for Participating

You will not be provided any incentives or payment to take part in this project.

Confidentiality

The information collected for this research project will kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. And it will not be revealed to

anyone except the principal investigator and assistants will be kept locked with key.

Right to Refusal

You have the full right to refuse from participating in this research. You have also the full right to leave from this study at any time you wish, without losing any of your right.

Person to contact

This research project will be reviewed and approved by the ethical committee of the University of Gondar. If you want to know more information you can contact the committee through the address below. If you have any question you can contact any of the following individuals and you may ask at any time you want.

1. Segenet Yitayew Mobil 0918300130 E-mail Segenety@yahoo.com
2. Atinkut Alamerew Mobil 0911313578 E-mail atinkut222@gmail.com
3. Mullusew Andualem Mobil 0913814608 E-mail muler.hi@gmail.com

Annex 4:

Translated Amharic Version

ስለጥናቱ መረጃና መጠይቅ

መግቢያ

ስሜ _____ ይባላል በአሁኑ ሰአት በጎንደር ዩኒቨርስቲ የድህረ ምረቃ ተማሪ ከሆነችው ሰገነትቨየታየው ጋር አብሬ እሰራለሁ፡፡

የጥናቱ ዋና አላማ በአሁኑ ወቅት በምስራቅ ጎጃም ዞን ባሉ ጤና ኬላዎች ውስት በሚሰሩ የጤና ኤክስቴንሽን ሰራቶኞች ያለውን ጤና መረጃ አያያዝ እና የጤና መረጃ እንዳይዙ የሚያደርጓቸውን ምክንያቶች ለማወቅ ነው፡፡ እርስዎ የዚህ ጥናት ተሳታፊ ይሆኑ ዘንድ ተመርጠዋል፡፡

ምንም እንኳ ይህ ጥናት የተደረገው የድህረ ምረቃ ሂደቱን ለማሟላት ቢሆንም ነገር ግን የዚህ ጥናት ጥቅም ከዚህ በላይ እንደሆነ ይታመናል፡፡ ይህም አሁን ያለውን የጤና ኤክስቴንሽን ሰራተኞች ን የመረጃ አያያዝነሁኔታ ከማወቅ በዘለለ መንገድ በአሁኑ ስዓት በመረጃ አያያዝ እየገጠሙ ያሉ ሁኔታዎችን ይመለከታል የችግሩንም ምክንያት ለማወቅ ይሞክራል ይህ ደግሞ በጤና ኤክስቴንሽን ሰራቶኞች ያለውን የመረጃ አያያዝ በተሸለ ሁኔታ እንደሚቀይር ይታመናል፡፡

ይህ መጠይቅ ደግሞ ጥናቱን ለማከናውን ጠቃሚ ስለሆነ እንዲሞሉ በትህትና ይጠየቃሉ ስመዎም በመጠይቁ አይፃፍም፣ የሚሰጡትም መልስ ደግሞ ሙሉ በሙሉ ሚስጥራዊነቱ ተጠብቆ በጥናቱ እለት ብቻ የሚውል ነው፡፡ ስለዚህ በሂደቱ ላይ እንዳስፈላጊነቱ በነፃነት ይሙሉ ምንም ሊያስፈራዎት አይገባም ከዚህ በላይ ደግሞ እርስዎ መሙላት የማይፈልጉት ጥያቄ ቢኖር ለመሙላት አይገደዱም፡፡ለጥያቄው ከ25 -30 ደይቃ በቂ ሲሆን ምንም አይነተ አስተያየት እና ጥያቄ ቢኖረዎት የተሰጠውን አድራሻ በመጠቀም ሊገናኙ ይችላሉ፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

☐ አዎን ☐ አይደለሁም

አመሰግናለሁ

የጥናቱን ዓላማና ጥቅም በደንብ ተገንዝቤ እና አውቄ በዚህ ጥናት ለመሳተፍ ወስኛለሁ

ፊርማ ቀን

_____ _____

ቃለመጠየቅ አቅራቢው

ስም ፊርማ ቀን

_____ _____ _____

አድራሻ፡-

ስም ሰገነት ይታየው

ሰልክ ቁጥር 251-918-30-01-30

ኢሜል *Segenety@yahoo.com*

የቃለ መጠይቁ መለያ ቁጥር----------

የሚሰሩበት ጤና ተቋም ስም----------

መመሪያ

ከዚህ በታችላሉት ጥያቄዎች መልስዎን ያክብቡ

ክፍል 1፤ ማህበራዊ ኢኮኖሚያዊና ስነ ህዝብ ሁኔታን የሚዳስሱ ጥያቄዎች

ተ.ቁ	ጥያቄ	ምርጫ	ዕለፍ
101	ዕድሜ	ዓመት	
102	ሀይማኖት	1..ኦርቶዶክስ 2.እስልምና 3. ፕሮቴስታንት 4.ካቶሊክ 5.ሌላ.....	
103	የትምህርት ደረጃ	1.10+1 2.ዲፕሎማ ነርስ 3. ሌላ	
104	የጋብቻ ሁኔታ	1.ያለገባች 2.ያገባች 3.የተፋታች 4.ባሏ የሞተባት	
105	መኖሪያ አድራሻ	1.ገጠር 2.ከተማ	
106	ወርሃዊ ክፍያ	ብር	
107	ያገልግሎት ዘመን	አመት	
108	የጤና መረጃን በተመለከተ ምን የመረጃ ምንጭ ትጠቀሚያለሽ? (ከአንድ በላ መመለስ ይቻላል)	1.ቴሌቪዥን 2.ሬድዮ 3.ጋዜጣ 4.የቀደመHMISዶክመንት/መዝገብ 5.የስነ ህዝብ ቆጠራ ውጤት 6.የኢትዮጲያን የስነ ህዝብ ጤና ቅኝት ውጤትን 7.ሌላ ካለ	

ክፍል ሁለት የጤና ኤክስቴንሽን ሰራተኞች መረጃ አያያዝ እውቀትን የሚዳስሱ ጥያቀዎች

201	መረጃ አያያዝ ማለት ምን ማለት ነው? (ከአንድ በላ መመለስ ይቻላል)	1.መረጃመሰብሰብ 2.መረጃማጠናከር 3.መረጃ ሪፖርት ማድረግ 4. መረጃን መጠቀም 5. አለውቀውም	
202	የመረጃ መሰብሰቢያ መንገዶች? (ከአንድ በላ መመለስ ይቻላል)	1.ቃለመጠይቅ 2.ምልከታ 3.መዝገብእይታ	
203	ለምሳሌ በንጥሽ 200አባውራ ቢኖርሽ እና ከነርሱም 30 አባውራዎች የሚጠበቅባቸውን ሁሉንየጤና ኤክስቴንሽን ፓኬጆችን ቢያጠናቅቁ በፐርሰንት ምን ያክሉ አባውረሽ አጠናቀቀ ብለሽ ሪፖርት ታደርጊያለሽ?	ምርጫ 1. 15% 2. 30% 3. 13%	
204	የስራ ክንውን ሪፖርት ለማን ታደርጊያለሽ? (ከአንድ በላ መመለስ ይቻላል)	1.ለክላስተር ጤና ጣቢያ 2.ለወረዳ ጤና ፅፈት ቤት	
205	አንድ መረጃ ጥራት(Data Quality) አለው ስንል ምን ማለታችን ነው? (ከአንድ በላ መመለስ ይቻላል)	1.የተሟላ መረጃ ሲሆን 2.ወጥ(ተቀራራቢ) ከቀደመው መረጃ ጋር 3.የቁጥር/የሂሳብ ስሌትስህተት ከሌለው 4.ድግግሞሽ ከሌለው 5.መደራረብ ከሌለው 6. ጊዜውን ጠብቆ ሲላክ	
206	አንድ ሪፖረት የተሟላ (complete)መረጃ አካቷል የምንለው መቼ ነው?	.መረጃውን ረፖርትማድረግ ካለባቸው ጤና ተቋማት ሁሉም ሪፖርት ከላኩ 2.የሂሳብ/የቁጥር ስህተት ከሌለበት 3.መረጃው በተመሳሳይ ገደብ(range) ውስጥ የሚገኝ ከሆነ 4.ሌላ ካለ.....	
207	ሪፖርቱ ትክክለኛ (correct) መረጃ ነው የምንለው መቼ ነው?	1.መርረጃውን ረፖርትማድረግ ካለባቸው ጤና ተቋማት ሁሉም ሪፖርት ከላኩ	

		2.የሂሳብ/የቁጥር ስህተት ከሌለበት 3.መረጃው ካለፉት ሪፖርቶች አንጻር በተመሳሳይ ገደብ (range) ውስጥ የሚገኝ ከሆነ 4.ሌላ ካለ	
208	ሪፖርቱ ወጥ(ተቀራራቢ) (consistency) ነው የምንለው መቼ ነው?	1.መርረጃውን ረፖርትማድረግ ካለባቸው ጤና ተቋማት ሁሉም ሪፖርት ከላኩ 2.የሂሳብ/የቁጥር ስህተት ከሌለበት 3.መረጃው በተመሳሳይ ገደብ(range) ውስጥ የሚገኝ ከሆነ 4.ሌላ ካለ.....	

<u>ክፍል ሶስት የጤና ኤክስቴንሽን ሰረተኞች መረጃ አያያዝ ተግባርን የሚዳስሱ ጥያቄዎች</u>

(Data management practice)

301	የጤና ኤክስቴንሽን ፓኬጆችን ዝርዝር የያዘ መረጃ አለሽ?	0.የለም 1. አዎ	
302	የትኞቹን መረጃ መያዣ ትጠቀሚያለሽ?	1.ኖት ፓድ 2.ኖት ቡክ 3. HMIS ፎርም 4.አልጠቀምም	
303	በየቀኑ የምትሰሪውን ስራ በትክክል በጊዜዉ ትመዘግቢያለሽ?	0. የለም 1. አዎ	
304	ለጥያቄ ቁጥር 303 ምልስዎ አዎ ከሆነ የተሰበሰበውን መረጃ(data) ወደ ጠቃሚ መረጃ(information) ወይም ሪፖርት በመቀየር ለአገልግሎት ታውያለሽ?	0. የለም 1. አዎ	
305	ለጥያቄ ቁጥር 304 ምልስዎ አዎ ከሆነ የተሰበሰበውን መረጃ ለምን ለምን አገልግሎት ትጠቀሚበታለሽ?	1.ለእለት ተእለት ተግባር 2.እቅድ ለማቀድ 3.ለስራ መገምገሚያ 4.ለአስተዳደራዊ ስራ 5.አልጠቀምበትም	
306	የተሰበሰበውን መረጃ በየስንት ጊዜው ሪፖርት ታደርጊያለሽ? (ከአንድ በላይ መመለስ ይቻላል)	1. ባስፈለገ ጊዜ 2. በዬሳምንቱ 3.በዬሁለት ሳምንት	

		4.በዬወሩ 5. አልከም 6.ለሪፖርት	

ክፍል አራት የጤና ኤክስቴንሽን ሰራተኞች መረጃ አያያዝን ተጽእኖ ሊያሳድሩ የሚችሉ አስተዳደራዊ ነገሮች የሚዳስሱ ጥያቄዎች

(Organizational factors)

401	በቢሮሽለስራሽአጋዥ የሚሆኑ ማጣቀሻ መጻህፍት(መመሪያዎች) አሉ?	0.የለም 1.አዎ	
402	በቢሮሽ የሪፖርት ቅፅ አለ ?	0.የለም 1.አዎ	
403	ከወረዳ እስከ ጤና ኬላ ትርንስፖርቴሽን አገልግሎት(መጓጓጥ) አለ ?	0.የለም 1.አዎ	
404	የስልክ አገልግሎት አለ? ለምሳሌ፤ሞባይል፡የቢሮ ስልክ	0.የለም 1.አዎ	
405	ወረዳዎ የጽህፈት መሳሪያዎችን(እስክብሪቶ፡ እርሳስ፡ማርከር) ያቀርባል?	0.የለም 1.አዎ	
406	በቢሮዎ የግራፍ ወረቀት አለ?	0.የለም 1.አዎ	
407	በቢሮዎ ለስራዎ የሚጠቀሙበት ወረቀት አለ?	.0.የለም 1.አዎ	
408	ድጋፋዊ ጉብኝት ተደርገለዎት ያውቃል?	.0.የለም 1.አዎ	መልስዎ የለም ከሆነ ወደጥያቄ4 12 ይሄዱ
409	ለጥያቄ ቁጥር 408 መልስዎ አዎ ከሆነ ለጥያቄ ቁጥር 408 በዬስንት ጊዜዉ?	1.በዬሳምንቱ 2.በዬወሩ 3. በዬሶስት ወሩ 4. በ6 ወሩ 5. በዬ አመቱ 6.ሌላከለ ይጠቀሰ…….	
410	ለጥያቄ ቁጥር 408 መልስዎ አዎ ከሆነ ሱፐርቫይዘሩ መረጃ አያያዝዎን ይመለከታል ?	.0.የለም 1.አዎ	
411	የጤና መረጃ አያያዝን በተመለከተ ስልጠና ወስደው ያውቃሉ?	.0.የለም 1.አዎ	
412	ለጥያቄ ቁጥር 411 መልስዎ አዎ ከሆነ በየትኞቹ ላይ ስልጠና ወስደዋል? (ከአንድ በላ መመለስ ይቻላል)	የስልጠናው አይነት 1.HMIS 2.መረጃ ማጠናቀር 3.ፕላኒንግ 4.መረጃ አጠቃቀም 5.ሪፖርት አደራረግ 6.ምንምስልጠናአልዎሰድ ኩም	

ክፍል አራት የጤና ኤክስቴንሽን ሰረተኞች መረጃ ኣያያዝን ሊያደናቅፉ የሚችሉ ቴክኒካል ነገሮች የሚዳስሱ ጥያቀዎች

(Technical factors)

501	የመረጃ መሰብሰቢያ፡ ሪፖርት ማድረጊያ እና መረጃ መመዝገቢያ ቅጾች ለመረደት ይከብዳሉ?	.0.ኣይከብዱም 1.ይከብዳሉ	
502	መልሰዎ አዎ ከሆነ ለመከበዳቸው ምክንያቱ ምን ይመስለዎታል?	1.ያልተለመዱ ቃላት 2.ቅጹ ምጽሀረቃላት መጠቀሙ 3.የቅጹ ወጥነት አለመኖር 4.ሌላ ካለ ይጠቀስ……	
503	ቋሚ የሪፖርት ማድረጊያ ጊዜ አለዎት?	0.የለም 1.አዎ	
504	መልስዎ አዎ ከሆነ ምን ያክል ጊዜውን ጠብቀው ይልካሉ?	1.ሁልጊዜ 2.አንዳንዴ ይዘገያል 3.ሁልጊዜ ይዘገያል	መልስዎ2እና3 ወደ ጥያቄ 508
505	ሪፖርቱ የሚዘገይበት ምክንያት ምን ይሆናል ብለሽ ታስቢያለሽ ?	1.መረጃን ለማጠናከር እና ሪፖርት ለማድረግ የእውቀት እጥረት 2. በስራ መደራረብ ምክንያት 3. ግዴለሽነት 4.አላውቅም 5.ሌላ ካለ ይጠቀስ……	
506	የእለት ተለት ስራዎን ሲሰሩ(መረጃ ሲሰበስቡ) አስቸጋሪ የሆነበዎት ነገር አለ?	.0.የለም 1.አዎ	
507	ለጥያቄ ቁጥር 506 መልስዎ አዎ ከሆነ ምንድን ነበር(ነው) ?	ትራንስፖርት የተገልጋይ ህብረተሰብ ፈቃደኛ አለመሆን የቦታ ርቀት የተገልጋይ ህብረተሰብ በቦታቸው አለመገኘት የመመዝገቢያ ቅጽ እጥረት ሌላ ካለ ይግለጹ---------	

ለትብብርዎ በጣም እናመሰግናለን፡፡

<u>የመረጃ መስጫ እና ስምምነት መጠየቂያ ቅፅ</u>

ይህ የመረጃ መስጫ እና የስምምነት መግለጫ ቅፅ ለምስራቅ ጎጃም ዞን በሚገኙ በጥናቱ ለተካተቱ ጤና ኬላ ለሚሰሩ የጤና ኤክስቴንሽን ሰራቶኞች የተዘጋጀ ነው፡፡

<u>የጥናቱ ርዕሰ ፡-</u> በምስራቅ ጎጃም ዞን በሚገኙጤና ኬላ ለሚሰሩ የጤና ኤክስቴንሽን ሰራቶኞች ያለውን የጤና መረጃ አያያዝ እና የጤና መረጃውን እንዳይዙ የሚያደርጓቸውን ምክንያቶች ማወቅ፡፡

<u>ዋና ተመራማሪ፡-</u> **ሰገነት ይታየው**

<u>የተቋሙ ስም ፡-</u> ጎንደር ዩኒቨርስቲ፣ህክምና ጤናሳይንስ ኮሌጅ፣ የህብረተሰብ ጤና አጠባበቅ ትምህርትቤት

<u>ወጭውን የሚሸፍነው ተቋም፡-</u> ጎንደር ዩኒቨርስቲ

<u>መግቢያ፡-</u>

ይህ የማብራሪያና የስምምነት ቅፅ አሁን እርስዎ እንዲሳተፉበት የምንጠይቀዎትን የምርምር ጥናት የሚያብራራ ነው፡፡ እባክዎ በዚህ ጥናት ከመሳተፍዎ በፊት የዚህ ጥናት አላማን መረዳትና ማንኛዉንም ጥናቱን የተመለከቱ ጥያቄዎች መጠየቅ ይችላሉ፡፡ በዚህ ጥናት መሳተፍ ከጀመሩ በኃላም በማንኛዉም ጊዜ ጥያቄዎች ካለዎት መጠየቅ ይችላሉ፡፡ ጥናቱ የሚካሄደዉ በአንድ የጤና መረጃ ትምህርት እጩ ተመራቂ ተማሪ፣ በሁለት የጎንደር ዩኒቨርስቲ የጥናቱ አማካሪዎች እንዲሁም በተመራቂው ተማሪ ተመርጠው የሰለጠኑ መረጃ ሰብሳቢዎች አማካኝነት ነው፡፡

<u>የጥናቱ አላማ፡</u>-

የዚህ ጥናት ዋና አላማ በምስራቅ ጎጃም ዞን በሚገኙጤና ኬላ ለሚሰሩ የጤና ኤክስቴንሽን ሰራቶኞች ያለውን የጤና መረጃ አያያዝ እና የጤና መረጃ እንዳይዙ የሚያደርጓቸውን ምክንያቶች ለማወቅ ሲሆን በዚህ ጥናት የሚገኙ ውጤቶች የጤና መረጃ የጤና ኤክስቴንሽን ሰራቶኞች እንዳይይዙ የሚያደርጓቸውን ምክንያቶች በማወቅ ተገቢውን የመፍትሔ ሀሳብ ከማስቀመጡም በላይ በዞኑ ውስጥ በቀጣይነት ለሚሰሩ ተመሳሳይ ጥናቶች እንደመነሻ ጥናት ሆኖ ያገለግላል፡፡

<u>የአሰራር ሂደት</u>

በምስራቅ ጎጃም ዞን በሚገኙ የመንግስት ጤና ተቋማት በሚሰሩ የጤና ኤክስቴንሽን ሰራቶኞች ያለውን የጤና መረጃ አያያዝ እና የጤና መረጃውን እንዳይይዙ የሚያደርጉአቸውን ምክንያቶች ለማወቅ በሚደረገው በዚህ ጥናት እርስዎ እንዲሳተፉ ጋብዘነዎታል፡፡ የዚህም ጥናት አላማ ከተረዱ በኃላ በጥናቱ ለመሳተፍ የሚችሉ ሲሆን መረጃ ሰብሳቢው በሚጠይቀው ጥያቄ ላይ ስምዎን መጥቀስ የማያስፈልገዎ ሲሆን የሚሰጡት መረጃ ሚስጥራዊነቱ የተጠበቀ ነው፡

<u>አደጋዎች ወይም አለመመቸት</u>

በዚህ ጥናት በመሳተፍዎ ተወሰነ ያለመመቸት ስሜት ሊሰማዎ ይችላል፣ በተለይ የስራ ጊዜዎትን ቢበዛ ለ30 ደቂቃ ያህል ሊሻማዎ ይችላል፡፡ ነገር ግን ጥናቱ ከሚሰጠው ጥቅም አኳያ እርስዎ በጥናቱ እንደሚሳተፉ ተስፋ አደርጋለሁ፡፡

<u>ጠቀሜታ</u>

በዚህ ጥናት ላይ በመሳተፍዎ ቀጥተኛ የሆነ ጥቅም ላያገኙ ይችላሉ ነገር ግን እርስዎ በዚህ ጥናት በመሳተፍዎ በጤናኤክስቴንሽን ሰራቶኞች የጤና መረጃ አያያዝ ላይ ያሉ ችግሮችን ለመለየት በሚደረገው ጥረት ትልቅ ድርሻ አለው፡፡

<u>የተሳትፎ ክፍያዎች</u>

በጥናቱ በመሳተፍዎ የሚሰጥ ክፍያ የለም

<u>ሚስጥር ስለመጠበቅ</u>

ለዚህ ጥናት የሚሰበሰብ መረጃ በሚስጥር ይጠበቃል የሚሰበሰበው መጠይቅ የእርስዎ ለመሆኑ መለያ አይኖረውም መረጃው በዋና ተመራማሪው ፋይል ተደርጎ የሚቀመጥ በመሆኑ ሌላ ሰው ሊያገኘው አይችልም፡፡

<u>በጥናቱ ያለመሳተፍ ወይም እራስን ከጥናቱ የማግለል መብት</u>

በጥናቱ ላለመሳተፍ ሙሉ መብት አለዎት

<u>የሚያገኙአቸው ሰዎች</u>

ይህ ጥናት በጎንደር ዩኒቨርሲቲ የጥናት አፅዳቂ ኮሚቴ ፀድቆ ወደ ጥናት የተገባ ሲሆን ተጨማሪ መረጃዎች ቢፈልጉ በሚከተሉት አድራሻዎች መገናኘት ይችላሉ፡-

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በጥናቱ ለመሳተፍ ፍቃደኛ ነዎት?

አዎን ☐ አይደለሁም ☐

አመሰግናለሁ

Declaration

I, the under signed, MPH student declare that this thesis is my original work in partial fulfillment of the requirement for the use degree of Master of Public Health.

Name: Segenet Yitayew

Signature: _____

Place of submission: institute of Public Health, College of Medicine and Health Science, University of Gondar.

Date of Submission: _____

This thesis work has been submitted for examination with my approval as University advisors

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